



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R05-OAR-2022-0137; FRL-9604-01-R5]

**Air Plan Approval; Illinois; Redesignation of the Illinois
Portion of the Chicago-Naperville, Illinois-Indiana-Wisconsin
Area to Attainment of the 2008 Ozone Standard**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to find that the Illinois portion of the Chicago-Naperville, IL-IN-WI area (Chicago area) is attaining the 2008 ozone National Ambient Air Quality Standard (NAAQS or standard) and to act in accordance with a request from Illinois submitted on January 25, 2022 to redesignate the Illinois portion of the Chicago area to attainment for the 2008 ozone NAAQS because the request meets the statutory requirements for redesignation under the Clean Air Act (CAA). EPA is proposing to approve, as a revision to the Illinois State Implementation Plan (SIP), the State's plan for maintaining the 2008 ozone NAAQS through 2035 in the Illinois portion of the Chicago area. EPA finds adequate and is proposing to approve the 2035 volatile organic compound (VOC) and oxides of nitrogen (NO_x) Motor Vehicle Emission Budgets (Budgets) for the Illinois portion of the Chicago area. Pursuant to section 110 and part D of the CAA, EPA is proposing to approve the VOC reasonably available control technology

(RACT), enhanced motor vehicle inspection and maintenance (I/M), clean-fuel vehicle programs (CFVP), and the enhanced monitoring of ozone and ozone precursors (EMP) SIP revisions submitted by Illinois, because they satisfy serious SIP requirements of the CAA for the Illinois portion of the Chicago area. Finally, EPA is proposing to approve a CAA section 182(f) waiver from NO_x RACT requirements for the Illinois portion of the Chicago area under the 2008 ozone NAAQS.

DATES: Comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2022-0137 at <https://www.regulations.gov> or via email to blakley.pamela@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional

submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www2.epa.gov/dockets/commenting-epa-dockets>.

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SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, we mean EPA. This supplementary information section is arranged as follows:

- I. What is EPA proposing?
- II. What is the background for these actions?
- III. What are the criteria for redesignation?
- IV. What is EPA's analysis of Illinois' redesignation request?
- V. Has the state adopted approvable motor vehicle emission budgets?
- VI. VOC RACT.
- VII. Enhanced I/M.
- VIII. Clean Fuels Vehicles Program.
- IX. Enhanced Monitoring Plan.
- X. NO_x RACT waiver.
- XI. Proposed actions.
- XII. Statutory and executive order reviews.

I. What is EPA proposing?

EPA is proposing to take several related actions. First, EPA is proposing to determine that the Illinois portion of the Chicago nonattainment area is attaining the 2008 ozone NAAQS, based on quality-assured and certified monitoring data for the

2019-2021 period. The Illinois portion of the Chicago area consists of Cook, DuPage, Kane, Lake, McHenry, and Will Counties and portions of Grundy (Aux Sable and Goose Lake Townships) and Kendall (Oswego Township) Counties in Illinois; the portions of the Chicago area outside of Illinois are Lake and Porter Counties in Indiana, and the portion of Kenosha County, Wisconsin east of Interstate 94. The Illinois portion of the Chicago area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. EPA is thus proposing to change the legal designation of the Illinois portion of the Chicago area from nonattainment to attainment for the 2008 ozone NAAQS. EPA is proposing to approve, as a revision to the Illinois SIP, the State's maintenance plan (such approval being one of the CAA criteria for redesignation to attainment status) for the area. The maintenance plan is designed to keep the Chicago area in attainment of the 2008 ozone NAAQS through 2035. As part of the maintenance plan, EPA is proposing to approve the 2035 VOC and NO_x Budgets for the Illinois portion of the Chicago area. EPA is also proposing to approve several elements which meet section 110 and part D of the CAA and EPA's regulations for an area which is classified as serious nonattainment for the 2008 ozone NAAQS. These elements include VOC RACT which includes the Stepan Co. construction permit, Enhanced I/M certification, the CFVP, and the EMP SIP revisions submitted by Illinois. Finally, EPA is proposing to approve a CAA section 182(f) waiver from NO_x RACT requirements for the Illinois portion

of the Chicago area under the 2008 ozone NAAQS. This NO_x RACT waiver is based on the most recent three years of complete, certified ozone monitoring data, which show attainment of the 2008 ozone NAAQS in the Chicago area and demonstrate that additional reduction of NO_x emissions in the area would not contribute to attainment of the 2008 ozone NAAQS.

II. What is the background for these actions?

EPA has determined that ground-level ozone is detrimental to human health. On March 27, 2008, EPA promulgated a revised 8-hour ozone NAAQS of 0.075 parts per million (ppm). See 73 FR 16436 (March 27, 2008). Under EPA's regulations at 40 CFR part 50, the 2008 ozone NAAQS is attained in an area when the 3-year average of the annual fourth highest daily maximum 8-hour average concentration is equal to or less than 0.075 ppm, when truncated after the thousandth decimal place, at all of the ozone monitoring sites in the area. See 40 CFR 50.15 and appendix P to 40 CFR part 50.

Upon promulgation of a new or revised NAAQS, section 107(d)(1)(B) of the CAA requires EPA to designate as nonattainment any areas that are violating the NAAQS, based on the most recent three years of quality assured ozone monitoring data. The Chicago area was originally designated as a marginal nonattainment area for the 2008 ozone NAAQS on June 11, 2012 (77 FR 34221), effective July 20, 2012. EPA reclassified the Chicago area from marginal to moderate nonattainment on May 4, 2016 (81 FR 26697), effective June 3, 2016. The Chicago area

was again reclassified to serious on August 23, 2019 (84 FR 44238), effective September 23, 2019.

III. What are the criteria for redesignation?

Section 107(d)(3)(E) of the CAA allows redesignation of an area to attainment of the NAAQS provided that: (1) the Administrator (EPA) determines that the area has attained the NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k) of the CAA; (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP, applicable Federal air pollutant control regulations, and other permanent and enforceable emission reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A of the CAA; and (5) the state containing the area has met all requirements applicable to the area for the purposes of redesignation under section 110 and part D of the CAA.

On April 16, 1992, EPA provided guidance on redesignations in the General Preamble for the Implementation of Title I of the CAA Amendments of 1990 (57 FR 13498) (the "General Preamble") and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

1. "Ozone and Carbon Monoxide Design Value Calculations,"

Memorandum from Bill Laxton, Director, Technical Support

Division, June 18, 1990;

2. "Maintenance Plans for Redesignation of Ozone and Carbon Monoxide Nonattainment Areas," Memorandum from G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, April 30, 1992;
3. "Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations," Memorandum from G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992;
4. "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (the "Calcagni Memorandum");
5. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992;
6. "Technical Support Documents (TSDs) for Redesignation of Ozone and Carbon Monoxide (CO) Nonattainment Areas," Memorandum from G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, August 17, 1993;
7. "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) On or After November 15, 1992," Memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993;

8. "Use of Actual Emissions in Maintenance Demonstrations for Ozone and CO Nonattainment Areas," Memorandum from D. Kent Berry, Acting Director, Air Quality Management Division, November 30, 1993;
9. "Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment," Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994; and
10. "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard," Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, May 10, 1995.

IV. What is EPA's analysis of Illinois' redesignation request?

A. Has the Chicago area attained the 2008 ozone NAAQS?

For redesignation of a nonattainment area to attainment, the CAA requires EPA to determine that the Illinois portion of Chicago area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). An area is attaining the 2008 ozone NAAQS if it meets the 2008 ozone NAAQS, as determined in accordance with 40 CFR 50.15 and appendix U of part 50, based on three complete, consecutive calendar years of quality-assured air quality data for all monitoring sites in the area. To attain the NAAQS, the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations (ozone design values) at each monitor must not exceed 0.075 ppm. The air quality data must be

collected and quality-assured in accordance with 40 CFR part 58 and recorded in EPA's Air Quality System (AQS). Ambient air quality monitoring data for the 3-year period must also meet data completeness requirements. An ozone design value is valid if daily maximum 8-hour average concentrations are available for at least 90 percent of the days within the ozone monitoring seasons,¹ on average, for the 3-year period, with a minimum data completeness of 75 percent during the ozone monitoring season of any year during the 3-year period. See section 4 of appendix P to 40 CFR part 50.

EPA has reviewed the available ozone monitoring data from monitoring sites in the Chicago area for the 2019-2021 period. These data have been quality assured, are recorded in the Air Quality System (AQS), and have been certified. These data demonstrate that the Chicago area is attaining the 2008 ozone NAAQS. The annual fourth-highest 8-hour ozone concentrations and the 3-year average of these concentrations (monitoring site ozone design values) for each monitoring site are summarized in Table 1.

Table 1. Annual fourth high daily maximum 8-hour ozone concentrations (ppm) and 3-year average of the fourth high daily maximum 8-hour ozone concentrations for the Chicago area.

State/County	Monitoring Site (AQS Site ID)	2019	2020	2021	3-year average 2019-2021
Illinois:					
Cook	Alsip (17-031-0001)	0.070	0.076	0.068	0.071
Cook	Chicago - SWFP (17-031-0032)	0.071	0.077	0.077	0.075
Cook	Chicago - ComED (17-031-0076)	0.065	0.063	0.070	0.067
Cook	Chicago - Taft (17-031-1003)	0.069	0.076	0.068	0.071
Cook	Lemont (17-031-1601)	0.068	0.078	0.072	0.072

¹ The ozone season is defined by state in 40 CFR 58 appendix D. The ozone season for Illinois is March-October. See 80 FR 65292, 65466-67 (October 26, 2015).

Cook	Shiller Park (17-031-3103)	0.064	0.068	0.060	0.064
Cook	Cicero (17-031-4002)	0.064	0.079	0.067	0.070
Cook	Des Plaines (17-031-4007)	0.066	0.072	0.069	0.069
Cook	Northbrook (17-031-4201)	0.069	0.079	0.075	0.074
Cook	Evanston (17-031-7002)	0.069	0.074	0.078	0.073
DuPage	Lisle (17-043-6001)	0.066	0.073	0.069	0.070
Kane	Elgin (17-089-0005)	0.071	0.073	0.068	0.070
Lake	Zion (17-097-1007)	0.066	0.076	0.077	0.073
McHenry	Cary (17-111-0001)	0.070	0.076	0.069	0.071
Will	Braidwood (17-197-1011)	0.060	0.067	0.065	0.064
Indiana:					
Lake	Gary (18-089-0022)	0.066	0.074	0.070	0.069
Lake	Hammond (18-089-2008)	0.065	0.071	0.068	0.068
Porter	Ogden Dunes (18-127-0024)	0.068	0.076	0.072	0.072
Porter	Valparaiso (18-127-0026)	0.071	0.067	0.066	0.068
Wisconsin:					
Kenosha	Chiwaukee (55-059-0019)	0.067	0.078	0.079	0.074
Kenosha	Kenosha (55-059-0025)	0.066	0.078	0.072	0.072

The Chicago area's 3-year ozone design value for 2019-2021 is 0.075 ppm,² which meets the 2008 ozone NAAQS. Therefore, in today's action, EPA proposes to determine that the Illinois portion of the Chicago area is attaining the 2008 ozone NAAQS.

EPA will not take final action to determine that the Illinois portion of the Chicago area is attaining the NAAQS, nor to approve the redesignation of the Illinois portion of the Chicago area, if the design value of a monitoring site in the area violates the NAAQS after proposal but prior to final approval of the redesignation. As discussed in section IV.D.3. below, Illinois has committed to continue monitoring ozone in this area to verify maintenance of the 2008 ozone NAAQS.

B. Has Illinois met all applicable requirements of section 110 and part D of the CAA for the Illinois portion of the Chicago area, and does Illinois have a fully approved SIP for the area under section 110(k) of the CAA?

² The monitor ozone design value for the monitor with the highest 3-year averaged concentration.

As criteria for redesignation of an area from nonattainment to attainment of a NAAQS, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of the CAA (see section 107(d)(3)(E)(v) of the CAA) and that the state has a fully approved SIP under section 110(k) of the CAA (see section 107(d)(3)(E)(ii) of the CAA). EPA finds that Illinois has met all applicable SIP requirements, for purposes of redesignation, under section 110 and part D of the CAA (requirements specific to nonattainment areas for the 2008 ozone NAAQS). The Illinois submittal included several nonattainment plan elements to address the serious nonattainment area requirements for the Illinois portion of the Chicago area for the 2008 ozone NAAQS. These include VOC RACT, CFVP, EMP, Enhanced I/M, and a 182(f) waiver from NO_x RACT. As discussed in sections VI through X below, EPA is proposing to approve these elements as meeting the requirements of section 182(c) of the CAA for the Illinois portion of the Chicago area under the 2008 ozone NAAQS. With the exception of those SIP elements, EPA finds that all applicable requirements of the Illinois SIP for the Chicago area, for purposes of redesignation, have been fully approved under section 110(k) of the CAA.

Recognizing that the serious VOC RACT, CFVP, EMP, enhanced I/M, and 182(f) waiver from NO_x RACT must be approved on or before we complete final rulemaking redesignating the area, we determine here that, assuming that this occurs, Illinois will have met all applicable section 110 and part D SIP requirements

of the CAA for purposes of redesignation. In making these determinations, EPA ascertained which CAA requirements are applicable to the Illinois portion of the Chicago area and the Illinois SIP and, if applicable, whether the required Illinois SIP elements are fully approved under section 110(k) and part D of the CAA. As discussed more fully below, SIPs must be fully approved only with respect to currently applicable requirements of the CAA.

The September 4, 1992 Calcagni memorandum describes EPA's interpretation of section 107(d)(3)(E) of the CAA. Under this interpretation, a state and the area it wishes to redesignate must meet the relevant CAA requirements that are due prior to the state's submittal of a complete redesignation request for the area. See also the September 17, 1993, Michael Shapiro memorandum and 60 FR 12459, 12465-66 (March 7, 1995) (redesignation of Detroit-Ann Arbor, Michigan to attainment of the 1-hour ozone NAAQS). Applicable requirements of the CAA that come due subsequent to the state's submittal of a complete request remain applicable until a redesignation to attainment is approved, but are not required as a prerequisite to redesignation. See section 175A(c) of the CAA and *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004). See also 68 FR 25424, 25427 (May 12, 2003) (redesignation of the St. Louis/East St. Louis area to attainment of the 1-hour ozone NAAQS).

Since EPA is proposing here to determine that the area has attained the 2008 standard, under 40 CFR 51.918, if that

determination is finalized, the requirements to submit certain planning SIPs related to attainment, including attainment demonstration requirements (the reasonably available control measures (RACM) requirement of section 172(c)(1) of the CAA, the reasonable further progress (RFP) and attainment demonstration requirements of sections 172(c)(2) and (6) and 182(b)(1) of the CAA, and the requirement for contingency measures of section 172(c)(9) of the CAA) would not be applicable to the area as long as it continues to attain the NAAQS and would cease to apply upon redesignation. In addition, in the context of redesignations, EPA has interpreted requirements related to attainment as not applicable for purposes of redesignation. For example, in the General Preamble, EPA stated that:

"The section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date. These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas." (General Preamble, 57 FR at 13564).

See also Calcagni memorandum at 6 ("The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard").

a. Section 110 General Requirements for Implementation Plans.

Section 110(a)(2) of the CAA delineates the general requirements for a SIP. Section 110(a)(2) provides that the SIP must have been adopted by the state after reasonable public notice and hearing, and that, among other things, it must: (1) include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; (2) provide for establishment and operation of appropriate devices, methods, systems and procedures necessary to monitor ambient air quality; (3) provide for implementation of a source permit program to regulate the modification and construction of stationary sources within the areas covered by the plan; (4) include provisions for the implementation of part C prevention of significant deterioration (PSD) and part D new source review (NSR) permit programs; (5) include provisions for stationary source emission control measures, monitoring, and reporting; (6) include provisions for air quality modeling; and, (7) provide for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires SIPs to contain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address transport of certain air pollutants, e.g., NO_x SIP call, the Clean Air Interstate Rule (CAIR), Cross State Air Pollution Rule (CSAPR). However, like many of the 110(a)(2) requirements, the section 110(a)(2)(D) SIP

requirements are not linked with a particular area's ozone designation and classification. EPA concludes that the SIP requirements linked with the area's ozone designation and classification are the relevant measures to evaluate when reviewing a redesignation request for the area. The section 110(a)(2)(D) requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area within the state. Thus, we believe these requirements are not applicable requirements for purposes of redesignation. See 65 FR 37890 (June 15, 2000), 66 FR 50399 (October 19, 2001), 68 FR 25418, 25426-27 (May 13, 2003).

In addition, EPA believes that other section 110 elements that are neither connected with nonattainment plan submissions nor linked with an area's ozone attainment status are not applicable requirements for purposes of redesignation. The area will still be subject to these requirements after the area is redesignated to attainment of the 2008 ozone NAAQS. The section 110 and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (i.e., for redesignations) of conformity requirements, as well as with section 184 ozone transport requirements. See Reading, Pennsylvania proposed and final rulemakings, 61 FR 53174-53176 (October 10, 1996) and 62 FR 24826 (May 7, 1997); Cleveland-Akron-Loraine, Wisconsin final rulemaking, 61 FR 20458 (May 7,

1996); and Tampa, Florida final rulemaking, 60 FR 62748 (December 7, 1995). See also the discussion of this issue in the Cincinnati, Ohio ozone redesignation, 65 FR 37890 (June 19, 2000), and the Pittsburgh, Pennsylvania ozone redesignation, 66 FR 50399 (October 19, 2001).

We have reviewed the Illinois SIP and have concluded that it meets the general SIP requirements under section 110 of the CAA, to the extent those requirements are applicable for purposes of redesignation.³

b. Part D Requirements.

Section 172(c) of the CAA sets forth the basic requirements of air quality plans for states with nonattainment areas that are required to submit them pursuant to section 172(b). Subpart 2 of part D, which includes section 182 of the CAA, establishes specific requirements for ozone nonattainment areas depending on the areas' nonattainment classifications.

The Chicago area is classified as serious under subpart 2 for the 2008 ozone NAAQS. As such, the area is subject to the subpart 1 requirements contained in section 172(c) and section 176 as well as the subpart 2 requirements contained in sections 182(a), (b), and (c) (marginal, moderate, and serious nonattainment area requirements). A thorough discussion of the requirements contained in section 172(c) and 182 can be found in the General Preamble.

³EPA has previously approved provisions of the Illinois SIP addressing section 110 elements under the 2008 ozone NAAQS. See 79 FR 62042 (Oct. 16, 2014) and 84 FR 49671 (Sept. 23, 2019).

i. Subpart 1 Section 172 Requirements.

Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all RACM as expeditiously as practicable and to provide for attainment of the primary NAAQS. Under this requirement, a state must consider all available control measures, including reductions that are available from adopting RACT on existing sources, for a nonattainment area and adopt and implement such measures as are reasonably available in the area as components of the area's attainment demonstration. Illinois submitted an attainment demonstration for the Illinois portion of the Chicago 2008 ozone NAAQS moderate nonattainment area on January 10, 2019. Because attainment has been reached in the Illinois portion of the Chicago area, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements are no longer considered to be applicable as long as the area continues to attain the standard until redesignation. See 40 CFR 51.918. If EPA finalizes the redesignation of the area, EPA will take no further action on the attainment demonstration submitted by Illinois.

The RFP requirement under section 172(c)(2) is defined as progress that must be made toward attainment. This requirement is not relevant for purposes of redesignation because the Chicago area has monitored attainment of the 2008 ozone NAAQS. See General Preamble, 57 FR at 13564.

Section 172(c)(3) requires submission and approval of a

comprehensive, accurate and current inventory of actual emissions. This requirement was superseded by the inventory requirement in section 182(a)(1) discussed below.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. On February 6, 2019 (84 FR 2063), EPA approved Illinois' certification that its existing SIP approved NSR regulations fully satisfy the NSR requirements set forth in 40 CFR 51.165 for both marginal and moderate ozone nonattainment areas for the 2008 ozone NAAQS. Nonetheless, EPA has determined that, since PSD requirements will apply after redesignation, an area being redesignated need not comply with the requirement that the NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." Illinois has demonstrated that the Illinois portion of the Chicago area will be able to maintain the 2008 ozone NAAQS without part D NSR in effect; therefore, EPA concludes that the state need not have a fully approved part D NSR program prior to approval of the redesignation request. See

rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996). The Illinois PSD program will become effective in the Illinois portion of the Chicago area upon redesignation to attainment. EPA approved Illinois' PSD program on September 9, 2021 (86 FR 50459).

Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the standard. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, we believe the Illinois SIP meets the requirements of section 110(a)(2) for purposes of redesignation.

Section 172(c)(9) requires the SIP to provide for the implementation of contingency measures if the area fails to make reasonably further progress or to attain the NAAQS by the attainment deadline. Because the Illinois portion of the Chicago area has attained the ozone NAAQS and is no longer subject to an RFP requirement, the section 172(c)(9) contingency measures are not applicable for purposes of redesignation. (General Preamble, 57 FR at 13564). See also 40 CFR 51.918.

ii. Section 176 Conformity Requirements.

Section 176(c) of the CAA requires that federally supported

or funded projects conform to the applicable SIP. The requirement to determine conformity applies to transportation plans, programs and projects that are developed, funded or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA interprets the conformity SIP requirements⁴ as not applying for purposes of evaluating a redesignation request under section 107(d) because state conformity rules are still required after redesignation and Federal conformity rules apply where state conformity rules have not been approved. *See Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001) (upholding this interpretation); *see also* 60 FR 62748 (December 7, 1995) (redesignation of Tampa, Florida).

EPA approved Illinois' general conformity SIP on December 23, 1997 (62 FR 67000). Illinois does not have a federally approved transportation conformity SIP. However, Illinois performs conformity analyses pursuant to EPA's Federal conformity rules. Illinois has also submitted 2035 VOC and NO_x

⁴ CAA section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain Federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from SIPs requiring the development of Motor Vehicle Emission Budgets, such as control strategy SIPs and maintenance plans.

Budgets for the Illinois portion of the Chicago area. The metropolitan planning organization that covers the Illinois portion of this area must use these Budgets in any conformity determination that is effective on or after the effective date of the maintenance plan approval.

iii. Subpart 2 Section 182(a), (b), and (c) Requirements.

Section 182(a)(1) requires states to submit a comprehensive, accurate, and current inventory of actual emissions from sources of VOC and NO_x emitted within the boundaries of the ozone nonattainment area. EPA approved Illinois' base year emissions inventory for the Illinois portion of the Chicago area on March 7, 2016 (81 FR 11671) and August 19, 2020 (85 FR 50955).

Under section 182(a)(2)(A), states with ozone nonattainment areas that were designated prior to the enactment of the 1990 CAA amendments were required to submit, within six months of classification, all rules and corrections to existing VOC RACT rules that were required under section 172(b)(3) prior to the 1990 CAA amendments. The Illinois portion of the Chicago area is not subject to the section 182(a)(2) RACT "fix up" requirement for the 2008 ozone NAAQS because it was designated as nonattainment for this standard after the enactment of the 1990 CAA amendments and because Illinois complied with this requirement for the Illinois portion of the Chicago area under the prior 1-hour ozone NAAQS. See February 21, 1980 (45 FR 11472); November 21, 1987 (52 FR 45333); and September 9, 1994

(59 FR 46562).

Section 182(a)(2)(B) requires each state with a marginal ozone nonattainment area that implemented or was required to implement a vehicle I/M program prior to the 1990 CAA Amendments to submit a SIP revision for an I/M program no less stringent than that required prior to the 1990 CAA Amendments or already in the SIP at the time of the CAA Amendments, whichever is more stringent. For the purposes of the 2008 ozone standard and the consideration of Illinois' redesignation request for this standard, the Illinois portion of the Chicago area is not subject to the section 182(a)(2)(B) requirement because the area was designated as nonattainment for the 2008 ozone standard after the enactment of the 1990 CAA Amendments and because Illinois complied with this requirement for the Illinois portion of the Chicago area under the prior 1-hour ozone NAAQS.

Section 182(a)(3) requires states to submit periodic emission inventories and a revision to the SIP to require the owners or operators of stationary sources to annually submit emission statements documenting actual VOC and NO_x emissions. As discussed below in section IV.D.4. of this proposed rule, Illinois will continue to update its emissions inventory at least once every three years. EPA approved Illinois' emission statement SIP for the Illinois portion of the Chicago area for the 2008 ozone NAAQS on July 11, 2017 (82 FR 31913).

Section 182(b)(1) requires the submission of an attainment demonstration and RFP plan. Illinois submitted an attainment

demonstration and RFP plan for the Illinois portion of the Chicago 2008 ozone NAAQS moderate nonattainment area on January 10, 2019. Because attainment has been reached, section 182(b)(1) requirements are no longer considered to be applicable if the area continues to attain the standard. If EPA finalizes approval of the redesignation of the area, EPA will take no further action on the attainment demonstration submitted by Illinois.

Section 182(b)(2) requires states with moderate nonattainment areas to implement VOC RACT with respect to each of the following: (1) all sources covered by a Control Technology Guideline (CTG) document issued between November 15, 1990, and the date of attainment; (2) all sources covered by a CTG issued prior to November 15, 1990; and (3) all other major non-CTG stationary sources. EPA approved Illinois' moderate VOC RACT SIP for the Illinois portion of the Chicago area on August 13, 2021 (86 FR 44616). Illinois submitted VOC RACT at the serious major source threshold on January 25, 2022. As discussed in section VI., below, EPA is proposing to approve these submittals as meeting the serious VOC RACT requirements of section 182(b)(2) of the CAA. EPA will not finalize this redesignation until we have fully approved Illinois' VOC RACT SIP.

Section 182(b)(3) requires states to adopt Stage II gasoline vapor recovery regulations. On May 16, 2012 (77 FR 28772), EPA determined that the use of onboard vapor recovery

technology for capturing gasoline vapor when gasoline-powered vehicles are refueled is in widespread use throughout the highway motor vehicle fleet and waived the requirement that current and former ozone nonattainment areas implement Stage II vapor recovery systems on gasoline pumps.

Section 182(b)(4) requires a basic vehicle I/M program in each state with a moderate ozone nonattainment area. EPA approved Illinois' enhanced I/M program on February 22, 1999 (64 FR 8517) and on August 13, 2014 (79 FR 47377). EPA approved Illinois' I/M program certification for the Illinois portion of the Chicago area for the moderate classification of the 2008 ozone NAAQS on August 19, 2020 (85 FR 50955).

Regarding the source permitting and offset requirements of sections 182(a)(2)(C), 182(a)(4), and 182(b)(5), Illinois currently has a fully approved part D NSR program in place. EPA approved Illinois' NSR SIP on May 13, 2003 (68 FR 25504), September 27, 1995 (60 FR 49778), December 17, 1992 (57 FR 59928), March 31, 1986 (51 FR 10837), September 25, 1985 (50 FR 38803), September 3, 1981 (46 FR 44172), and February 21, 1980 (45 FR 11470). Further, EPA approved Illinois' SIP revision addressing the NSR requirements for the 2008 ozone NAAQS on February 6, 2019 (84 FR 2063). In addition, EPA approved Illinois' PSD program on September 9, 2021 (86 FR 50459), which will become effective in the Illinois portion of the Chicago area upon redesignation to attainment.

Section 182(c) contains the requirements for areas

classified as serious. On August 23, 2019 (84 FR 44238), EPA reclassified the Chicago area from moderate to serious and established August 3, 2020 and March 23, 2021 as the due dates for serious area SIP revisions.

Section 182(c)(1) of the CAA requires states with nonattainment areas classified serious or higher to adopt and implement a program to improve air monitoring for ambient concentrations of ozone, NO_x and VOC. EPA initiated the Photochemical Assessment Monitoring Stations (PAMS) program in February 1993. The PAMS program required the establishment of an enhanced monitoring network in all ozone nonattainment areas classified as serious, severe, or extreme. On February 25, 1994 (59 FR 9091), EPA approved Illinois' SIP revision establishing an EMP. For the reasons discussed in section IX, EPA is proposing to approve the Illinois' EMP certification for the 2008 ozone NAAQS. EPA will not finalize this redesignation until it has approved the EMP program certification.

CAA section 182(c)(3) requires states with ozone nonattainment areas classified as serious or higher to adopt and implement a program for an Enhanced I/M program. Illinois submitted an Enhanced I/M performance modeling analysis on January 25, 2022 to support the I/M program certification. For the reasons discussed in section VII, below, EPA is proposing to approve the Illinois I/M certification as meeting the section 182(c)(3) serious enhanced I/M requirements for the Illinois portion under the 2008 ozone NAAQS. EPA will

not finalize this redesignation until it has approved the I/M program certification.

CAA section 182(c)(4) requires states with ozone nonattainment areas classified as serious or higher to submit a SIP revision describing implementation of a CFVP, as described in CAA title II part C (40 CFR 88). EPA approved Illinois' CFVP on March 19, 1996 (61 FR 11139). CAA section 182(c)(4) included numerical standards for the CFVP that were intended to encourage innovation and reduce emissions for fleets of motor vehicles in certain nonattainment areas as compared to conventionally fueled vehicles available at the time. As originally adopted, those Clean Fuel Fleet standards were substantially more stringent than the standards that applied to vehicles and engines generally. Now that EPA has begun implementing Tier 3 emission standards in 40 CFR part 86, subpart S, the Clean Fuel Fleet standards are either less stringent than or equivalent to the standards that apply to vehicles and engines generally. On July 29, 2021 (86 FR 34308), EPA published a final rule in which EPA determined that vehicles and engines certified to current emission standards under 40 CFR part 86 or 1036 are deemed to also meet the Clean Fuel Fleet standards as Ultra Low-Emission Vehicles.

For the reasons discussed in section VIII., EPA is proposing to approve the Illinois' certification that its current CFVP meets the serious CFVP requirements for the Illinois portion for the 2008 ozone NAAQS. EPA will not

finalize this redesignation until it has approved the CFVP program.

The remaining section 182(c) requirements for areas classified as serious include: an attainment demonstration, RFP, RFP contingency measures, and a transportation control demonstration. These elements are not needed to redesignate the Illinois portion because the area has attained the 2008 ozone NAAQS. This rationale is outlined in 40 CFR 51.918, the General Preamble, and the Calcagni memorandum at 6 ("The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard."). EPA believes that it is reasonable to interpret these provisions so as not to require areas that are meeting the ozone standard to make the SIP submissions to EPA described in the provisions as long as the areas continue to meet the standard. (If such an area were to monitor a violation of the standard prior to being redesignated to attainment, however, the area would have to address the pertinent requirements and submit the SIP revisions described in those provisions to EPA.)

Thus, as discussed above, with approval of Illinois' VOC RACT, enhanced I/M certification, the CFVP certification, the EMP SIP section, and the 182(f) waiver from NO_x RACT, EPA finds that the Illinois portion will satisfy all applicable requirements for purposes of redesignation under section 110 and part D of the CAA.

Section 182(f) of the CAA establishes NO_x requirements for ozone nonattainment areas. Section 182(f)(1) generally requires major sources of NO_x to be covered by the same levels of emission controls as required for major sources of VOC. Since moderate (or above) ozone nonattainment areas are required to be covered by RACT rules for major VOC sources, these ozone nonattainment areas are also required to have NO_x RACT rules. Section 182(f)(1) of the CAA, however, also provides that the requirement for such NO_x emission controls does not apply (can be waived) in an area if the Administrator determines that net air quality benefits are greater in the absence of the NO_x emission reductions. The NO_x emission control requirements can also be waived if the Administrator determines that additional reductions of NO_x emissions would not contribute to attainment of the ozone NAAQS.

On January 25, 2022, Illinois requested a waiver from NO_x RACT requirements for the Illinois portion of the Chicago area based on the fact that the 2008 ozone standard had been attained in the Chicago area and additional NO_x emission reductions in this area are not needed to attain the 2008 ozone NAAQS. As discussed in section X below, EPA is proposing to grant Illinois a waiver from NO_x RACT for the Illinois portion of the Chicago area for the 2008 ozone NAAQS.

The Illinois portion has a fully approved SIP for purposes of redesignation under section 110(k) of the CAA. At various times, Illinois has adopted and submitted, and EPA has approved,

provisions addressing the various SIP elements applicable for the ozone NAAQS. As discussed above, if EPA finalizes approval of Illinois' VOC RACT submissions, enhanced I/M certification, CFVP certification, EMP certification, and 182(f) waiver from NO_x RACT, EPA will have fully approved the Illinois SIP for the Illinois portion of the Chicago area under section 110(k) for all requirements applicable for purposes of redesignation under the 2008 ozone NAAQS. EPA may rely on prior SIP approvals in approving a redesignation request (see the Calcagni memorandum at page 3; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-990 (6th Cir. 1998); *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001)). Additional measures may also be approved in conjunction with a redesignation action (see 68 FR 25426 (May 12, 2003) and citations therein).

C. Are the air quality improvements in the Chicago area due to permanent and enforceable emission reductions?

To redesignate an area from nonattainment to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from the implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable emission reductions. EPA has determined that Illinois has demonstrated that the observed ozone air quality improvement in the Illinois portion of the Chicago area is due to permanent and enforceable reductions in VOC and NO_x emissions resulting from

state measures adopted into the SIP and Federal measures.

In making this demonstration, the state has calculated the change in emissions between 2011 and 2019. The reduction in emissions and the corresponding improvement in air quality over this time period can be attributed to several regulatory control measures that the Chicago area and upwind areas have implemented in recent years. In addition, Illinois provided an analysis to demonstrate the improvement in air quality was not due to unusually favorable meteorology. Based on the information summarized below, EPA finds that Illinois has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions.

1. Permanent and enforceable emission controls implemented.

a. Regional NO_x Controls.

Clean Air Interstate Rule (CAIR)/Cross State Air Pollution Rule (CSAPR).

Under the "good neighbor provision" of CAA section 110(a)(2)(D)(i)(I), states are required to address interstate transport of air pollution. Specifically, the good neighbor provision provides that each state's SIP must contain provisions prohibiting emissions from within that state which will contribute significantly to nonattainment of the NAAQS, or interfere with maintenance of the NAAQS, in any other state.

On May 12, 2005, EPA published CAIR, which required eastern states, including Illinois, to prohibit emissions consistent with annual and ozone season NO_x budgets and annual sulfur

dioxide (SO₂) budgets (70 FR 25152). CAIR addressed the good neighbor provision for the 1997 ozone NAAQS and 1997 fine particulate matter (PM_{2.5}) NAAQS and was designed to mitigate the impact of transported NO_x emissions, a precursor of both ozone and PM_{2.5}, as well as transported SO₂ emissions, another precursor of PM_{2.5}. The United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) remanded CAIR to EPA for replacement in 2008. *North Carolina v. EPA*, 531 F.3d 896, modified, 550 F.3d 1176 (2008). While EPA worked on developing a replacement rule, implementation of the CAIR program continued as planned with the NO_x annual and ozone season programs beginning in 2009 and the SO₂ annual program beginning in 2010.

On August 8, 2011 (76 FR 48208), acting on the D.C. Circuit's remand, EPA published CSAPR to replace CAIR and to address the good neighbor provision for the 1997 ozone NAAQS, the 1997 PM_{2.5} NAAQS, and the 2006 PM_{2.5} NAAQS. Through Federal Implementation Plans, CSAPR required electric generating units (EGUs) in eastern states, including Illinois, to meet annual and ozone season NO_x budgets and annual SO₂ budgets implemented through new trading programs. After delays caused by litigation, EPA started implementing the CSAPR trading programs in 2015, simultaneously discontinuing administration of the CAIR trading programs. On October 26, 2016, EPA published the CSAPR Update, which established, starting in 2017, a new ozone season NO_x trading program for EGUs in eastern states, including Illinois, to address the good neighbor provision for the 2008

ozone NAAQS (81 FR 74504). The CSAPR Update is estimated to result in a 20 percent reduction in ozone season NO_x emissions from EGUs in the eastern United States, a reduction of 80,000 tons in 2017 compared to 2015 levels. The reduction in NO_x emissions from the implementation of CAIR and then CSAPR occurred by the attainment years and additional emission reductions will occur throughout the maintenance period.

b. Illinois Point Source Reductions.

Illinois has implemented several programs to control emissions for point sources. Illinois has RACT for all major emissions sources and for all sources covered by a CTG. A CTG is a document issued by EPA which establishes a "presumptive norm" for RACT for a specific VOC source category. Illinois has adopted New Source Performance Standards (NSPS) for three source categories: Reciprocating Internal Combustion Engine Standards; Industrial/Commercial/Institutional Steam Generating Units; and Crude Oil and Natural Gas Production, Transmission and Distribution. National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology ("MACT") Standards that cover the Reciprocating Internal Combustion Engines, Industrial/Commercial/Institutional Boilers and Process Heaters source categories are also being implemented in the Illinois portion.

c. Federal Emission Control Measures.

Reductions in VOC and NO_x emissions have occurred statewide and in upwind areas as a result of Federal emission control

measures, with additional emission reductions expected to occur in the future. Federal emission control measures include the following:

Tier 3 Emission Standards for Vehicles and Gasoline Sulfur Standards. On April 28, 2014 (79 FR 23414), EPA promulgated Tier 3 motor vehicle emission and fuel standards to reduce both tailpipe and evaporative emissions and to further reduce the sulfur content in fuels. The rule is being phased in between 2017 and 2025. Tier 3 sets new tailpipe standards for the sum of VOC and NO_x and for particulate matter (PM). The VOC and NO_x tailpipe standards for light-duty vehicles represent approximately an 80 percent reduction from today's fleet average and a 70 percent reduction in per-vehicle PM standards. Heavy-duty tailpipe standards represent about a 60 percent reduction in both fleet average VOC and NO_x and per-vehicle PM standards. The evaporative emissions requirements in the rule will result in approximately a 50 percent reduction from current standards and apply to all light-duty and on-road gasoline-powered heavy-duty vehicles. Finally, the rule lowered the sulfur content of gasoline to an annual average of 10 ppm by January 2017. As projected by these estimates and demonstrated in the on-road emission modeling for the Illinois portion, some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period, as older vehicles are replaced with newer, compliant model years.

Heavy-Duty Diesel Engine Rules. In July 2000, EPA issued a rule for on-road heavy-duty diesel engines that includes standards limiting the sulfur content of diesel fuel. Emissions standards for NO_x, VOC, and PM were phased in between model years 2007 and 2010. In addition, the rule reduced the highway diesel fuel sulfur content to 15 parts per million by 2007, leading to additional reductions in combustion NO_x and VOC emissions. EPA has estimated future year emission reductions due to implementation of this rule. Nationally, EPA estimated that by 2015 NO_x and VOC emissions would decrease by 1,260,000 tons and 54,000 tons, respectively. Nationally, EPA estimated that by 2030 NO_x and VOC emissions will decrease by 2,570,000 tons and 115,000 tons, respectively. As projected by these estimates and demonstrated in the on-road emission modeling for the Illinois portion, some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period, as older vehicles are replaced with newer, compliant model years.

Non-road Diesel Rule. On June 29, 2004 (69 FR 38958), EPA issued a rule adopting emissions standards for non-road diesel engines and sulfur reductions in non-road diesel fuel. This rule applies to diesel engines used primarily in construction, agricultural, and industrial applications. Emission standards were phased in for the 2008 through 2015 model years based on engine size. The sulfur limits for non-road diesel fuels were phased in from 2007 through 2012. EPA estimated that compliance

with this rule will cut NO_x emissions from these non-road diesel engines by approximately 90 percent. As projected by these estimates and demonstrated in the non-road emission modeling for the Illinois portion, some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period.

Non-road Spark-Ignition Engines and Recreational Engine Standards. On November 8, 2002 (67 FR 68242), EPA adopted emission standards for large spark-ignition engines such as those used in forklifts and airport ground-service equipment; recreational vehicles such as off-highway motorcycles, all-terrain vehicles, and snowmobiles; and recreational marine diesel engines. These emission standards were phased in from model year 2004 through 2012. EPA estimated an overall 72 percent reduction in VOC emissions from these engines and an 80 percent reduction in NO_x emissions. As projected by these estimates and demonstrated in the non-road emission modeling for the Illinois portion, as shown in tables 2 and 3 below, some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period.

Category 3 Marine Diesel Engine Standards. On April 30, 2010 (75 FR 22896), EPA issued emission standards for marine compression-ignition engines at or above 30 liters per cylinder. Tier 2 emission standards applied beginning in 2011 and are expected to result in a 15 to 25 percent reduction in NO_x

emissions from these engines. Final Tier 3 emission standards applied beginning in 2016 and are expected to result in approximately an 80 percent reduction in NO_x from these engines. As projected by these estimates and demonstrated in the non-road emission modeling for the Illinois portion, some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period.

2. Emission reductions.

Illinois is using a 2011 emissions inventory as the nonattainment year. This is appropriate because it was one of the years used to designate the Chicago area as nonattainment. Illinois is using 2019 as the attainment year, which is appropriate because it is one of the years in the 2019-2021 period used to demonstrate attainment.

The 2011 emissions inventory was derived from an emissions inventory for the Chicago area approved by EPA as meeting the requirements of CAA section 182(a)(1). See 81 FR 11671 (March 7, 2016).

Point source information was compiled from 2019 annual emissions reports submitted to the Illinois Environmental Protection Agency (Illinois EPA) by emission sources. Area source emissions were calculated primarily using an emission factor multiplied by an activity rate (e.g., population, employment, amount of fuel burned, etc.).

On-road mobile source emissions were calculated using EPA's

MOVES3 emissions model with vehicle miles traveled (VMT) data provided by the Illinois Department of Transportation (IDOT). Non-road mobile source emissions were also calculated using EPA's MOVES3 emissions model. Aircraft emissions were developed using the Federal Aviation Administration's data from the 2017 Terminal Area Forecast for the Illinois portion of the Chicago area. Emissions from locomotives were developed from 2017 values using existing work from other rail projects. Commercial marine vessel emissions were developed from 2019 values using the Army Corps of Engineers 2019 report of Waterborne Commerce of the United States.

Illinois has projected NO_x and VOC emissions for the Illinois portion of the Chicago area for 2035. Illinois has also projected 2030 emissions to represent a midpoint during the maintenance period. Emissions for these two projection years are compared to emission levels in 2019 to determine whether the maintenance plan is adequate to maintain the NAAQS during this period. Point and area source categories, along with non-road categories not calculated by the MOVES model, were calculated using EPA's 2011 Version 6.2 emissions modeling platform, also known as the NODA. This data set projects 2011 emissions to 2017 and 2025. To account for a base year of 2019 and projected years of 2030 and 2035, additional manipulation had to be performed to obtain appropriate growth factors. In this case, the Excel TREND function was used to extrapolate data from the individual years of 2017 to 2025 in order to obtain 2030

emissions.

Emissions presented in the NODA are expressed in tons/year. Growth factors for the applicable year (2030 or 2035) were calculated by taking the ratio of the future year to the base year. Illinois had already calculated daily emissions for the 2019 inventory, so calculating emissions for the future years was a simple multiplication of the applicable growth factor to obtain the future year emissions.

Illinois EPA's 2019 inventory included some point sources that began operation after the 2011 NODA base year. These emissions were grown using growth factors already calculated using the NODA for the same source classification codes (SCC). Illinois modified the projections in the NODA point source portion of the inventory in certain cases where fuel switching and/or shutdowns occurred. Two large combustion sources were also included in the 2030 and 2035 point source inventories. These sources obtained a construction permit but have not yet been constructed. Daily emissions for these sources were calculated by dividing the allowable emissions by 365.

On-road and non-road emissions for 2030 and 2035 were calculated using the MOVES3 model. The inputs assume the continued phase-in of the Tier 3 standards beginning in 2017, and continued operation of Illinois' vehicle I/M program, and all existing fuel programs.

As part of common practice when projecting non-road emissions, emissions from a proposed third airport for the

Chicago area have been included in this inventory.

Emissions for the Indiana and Wisconsin portions of the Chicago area were based on inventories developed by those states in an earlier round of redesignation requests. For the current document, 2011 and 2030 emissions are directly taken from these earlier inventories, whereas 2019 and 2035 emissions were determined by interpolation and extrapolation from these inventories.

Using the inventories described above, Illinois' submittal documents the changes in VOC and NO_x emissions from 2011 to 2019 for the Illinois portion area. Emissions data are shown in Tables 2 and 3.

Table 2. Emissions Reduction of NO_x emissions for the Illinois, Indiana, and Illinois portions of the Chicago nonattainment area 2011-2019 (tons/day)

Sector	2011 nonattainment year	2019 attainment year	Emissions Reduction 2011-2019
Illinois			
Point	119.99	82.78	37.21
Area	32.03	34.63	-2.60
On-Road	285.34	134.37	150.97
Non-road	176.60	121.65	54.95
Total	613.96	373.43	240.53
Indiana			
Point	94.81	64.20	30.61
Area	9.39	0.91	8.48
On-road	24.70	14.91	9.79
Non-road	15.84	13.43	2.41
Total	144.74	93.45	51.29
Wisconsin			
Point	8.80	0.08	8.72
Area	1.20	1.13	0.07
On-Road	4.82	1.81	3.01
Non-road	2.25	1.64	0.61
Total	17.07	4.66	12.41
Chicago-Naperville, IL-IN-WI 2008 ozone area			
Illinois	613.96	373.43	240.53
Indiana	144.74	93.45	51.29
Wisconsin	17.07	4.66	12.41

Total	775.77	471.54	304.23
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Table 3. Emissions Reduction of VOC emissions for the Illinois, Indiana, and Wisconsin portions of the Chicago nonattainment area 2011-2019 (tons/day)

Sector	2011	2019	Emissions Reduction 2011-2019
Illinois			
Point	48.25	46.32	1.93
Area	215.14	232.00	-16.86
On-Road	72.43	66.45	5.98
Non-road	101.83	67.67	34.16
Total	437.65	412.44	25.21
Indiana			
Point	17.76	11.30	6.46
Area	18.26	17.00	1.26
On-road	9.58	6.80	2.78
Non-road	21.43	5.53	15.90
Total	67.03	40.63	26.40
Wisconsin			
Point	0.64	0.19	0.45
Area	4.10	3.58	0.52
On-Road	1.90	0.89	1.01
Non-road	1.14	0.70	0.44
Total	7.78	5.36	2.42
Chicago-Naperville, IL-IN-WI 2008 ozone area			
Illinois	437.65	412.44	25.21
Indiana	67.03	40.63	26.40
Wisconsin	7.78	5.36	2.42
Total	512.46	458.43	54.03

As shown in Table 2 and 3, NO_x and VOC emissions in the Illinois portion declined by 240.53 tons/day and 25.21 tons/day, respectively, between 2011 and 2019. NO_x and VOC emissions throughout the entire Chicago area declined by 304.23 tons/day and 54.03 tons/day, respectively, between 2011 and 2019.

3. Meteorology.

To further support Illinois' demonstration that the improvement in air quality between the year violations occurred and the year attainment was achieved is due to permanent and

enforceable emission reductions, and not unusually favorable meteorology, Illinois submitted a classification and regression tree (CART) analysis completed by the Lake Michigan Air Directors Consortium (LADCO). A CART analysis is a statistical analysis that constructs ozone concentration trends for high ozone days having similar meteorological characteristics. The purpose of this analysis is to minimize the effect of meteorological variability on the trend in ozone concentrations. The resulting trend in ozone concentrations is due to reductions of anthropogenic emissions.

The CART analysis used ozone concentrations from the Zion and Chiwaukee monitors for the 2005-2020 period. These two monitors were chosen because the Chiwaukee monitor is the design value monitor for the Chicago area and the Zion monitor is very near the location of the Chiwaukee monitor. Both monitors are north of the urban center, as well as being near the Lake Michigan shoreline. The CART analysis shows that days with high ozone as well as high temperatures and southerly winds show a marked decrease in ozone concentrations over the 16-year period. The analysis supports the conclusion that the decrease in ozone concentrations leading to attainment of the ozone standard in the Chicago area is caused by actual reductions in emissions, not by favorable meteorological conditions.

As discussed above, Illinois identified numerous permanent and enforceable control measures that resulted in the reduction of VOC and NO_x emissions from 2011 to 2019. In addition, LADCO's

CART analyses of meteorological variables associated with ozone formation demonstrate that the improvement in air quality in the Chicago area between the year violations occurred and the year attainment was achieved is not due to unusually favorable meteorology. Therefore, EPA finds that Illinois has shown that the air quality improvements in the Illinois portion of the Chicago area are due to permanent and enforceable emissions reductions.

D. Does Illinois have a fully approvable ozone maintenance plan for the Chicago area?

As one of the criteria for redesignation to attainment section 107(d)(3)(E)(iv) of the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA. Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the maintenance plan must demonstrate continued attainment of the NAAQS for at least 10 years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan which demonstrates that attainment of the NAAQS will continue for an additional 10 years beyond the initial 10-year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures, as EPA deems necessary, to ensure prompt correction of the future NAAQS violation.

The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five elements: (1) an attainment emission inventory; (2) a maintenance demonstration; (3) a commitment for continued air quality monitoring; (4) a process for verification of continued attainment; and (5) a contingency plan. In conjunction with its request to redesignate the Illinois portion of the Chicago area to attainment for the 2008 ozone NAAQS, Illinois submitted a SIP revision to provide for maintenance of the 2008 ozone NAAQS through 2035, more than 10 years after the expected effective date of the redesignation to attainment. As discussed below, EPA proposes to find that Illinois' ozone maintenance plan includes the necessary components and to approve the maintenance plan as a revision of the Illinois SIP.

1. Attainment inventory.

EPA is proposing to determine that the Illinois portion of the Chicago area has attained the 2008 ozone NAAQS based on monitoring data for the 2019-2021 period. Illinois selected 2019 as the attainment emissions inventory year to establish attainment emission levels for VOC and NO_x. The attainment emissions inventory identifies the levels of emissions in the Chicago area that are sufficient to attain the 2008 ozone NAAQS. The derivation of the attainment year emissions was discussed above in section IV.C.2 of this proposed rule. The attainment level emissions, by source category, are summarized in Tables 2 and 3 above.

2. Has the state documented maintenance of the ozone standard in the Chicago area?

Illinois has demonstrated maintenance of the 2008 ozone NAAQS through 2035 by ensuring that current and future emissions of VOC and NO_x for the Illinois portion of the Chicago area remain at or below attainment year emission levels. A maintenance demonstration need not be based on modeling.⁵ See *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), *Sierra Club v. EPA*, 375 F. 3d 537 (7th Cir. 2004). See also 66 FR 53094, 53099-53100 (October 19, 2001), 68 FR 25413, 25430-25432 (May 12, 2003).

Illinois is using emissions inventories for the years 2030 and 2035 to demonstrate maintenance. 2035 is more than 10 years after the expected effective date of the redesignation to attainment and 2030 was selected to demonstrate that emissions are not expected to spike in the interim between the attainment year and the final maintenance year. The emissions inventories were developed as described below.

Illinois calculated emissions for point and area source categories, along with non-road categories not calculated by the MOVES model, using the NODA. This data set projects 2011

⁵ While modeling is not required, Illinois cited photochemical modeling performed by EPA and LADCO in support of the interstate transport "Good Neighbor" provision of the CAA for the 2015 ozone NAAQS. These modeling results project the highest 2023 average design values to be 0.0662 and 0.0668, well below the 2008 ozone NAAQS. Compared to actual monitored 2009-2013 average design values, both sets of 2023 modeling results show large decreases in ozone concentrations, especially on in the heart of the urban area and at the critical monitors at the north of the nonattainment area along the shore of Lake Michigan. These results provide evidence that ozone concentrations will continue to decrease across the entire nonattainment area.

emissions to 2019 and 2035.

Emissions presented in the NODA are expressed in tons/year. Growth factors for the applicable year (2030 or 2035) were calculated by taking the ratio of the future year to the base year. Illinois had already calculated daily emissions for the 2019 attainment inventory, so to calculate emissions for the future years, Illinois multiplied the 2019 emissions by the applicable growth factor. Illinois' 2019 inventory included some point sources that began operation after the 2011 NODA base year. These emissions were developed using growth factors already calculated using the NODA for the same SCC. Illinois EPA notes that the projections in the NODA calculated by the IPM model do not agree in certain cases with what Illinois believes will actually happen with fuel switching and/or shutdowns. In those cases, Illinois modified the NODA projections in the point source portion of the inventory. In the 2030 and 2035 point source inventories, Illinois also included two large combustion sources that have obtained construction permits but have not yet been constructed. Daily emissions for these sources were calculated by dividing the allowable emissions by 365.

On-road and non-road emissions for 2030 and 2035 were calculated using the MOVES3 model. The inputs assume the continued phase-in of the phase-in of the Tier 3 standards beginning in 2017, continued operation of Illinois' vehicle I/M program, and reformulated gasoline program). Total VMT for 2030 and 2035 were assumed to increase at a rate of 1.5 percent per

year from 2019. As part of common practice when projecting non-road emissions, emissions from a proposed third airport for the Chicago area have been included in this inventory.

Projected emissions data are shown in Tables 4 and 5 below.

Table 4. Projected Emissions of NO_x emissions for the Illinois, Indiana, and Wisconsin portions of the Chicago nonattainment area 2030 and 2035 (tons/day)

Sector	2019 attainment year	2030 interim year	2035 maintenance year	Emissions Reduction 2019-2035
Illinois				
Point	82.78	97.92	101.13	-18.35
Area	34.63	34.98	35.15	-0.52
On-Road	134.37	55.93	48.80	85.57
Non-road	121.65	106.10	108.27	13.38
Total	373.43	294.93	293.35	80.08
Indiana				
Point	64.20	62.23	61.93	2.27
Area	0.91	0.88	0.87	0.04
On-road	14.91	6.62	5.51	9.40
Non-road	13.43	10.25	8.49	4.94
Total	93.45	79.98	76.80	16.65
Wisconsin				
Point	0.08	0.12	0.12	-0.04
Area	1.13	0.95	0.96	0.17
On-Road	1.81	0.85	0.70	1.11
Non-road	1.64	1.21	1.21	0.43
EGU Emission credit		7.22	7.22	7.22
Total	4.66	3.13	2.99	1.67
Chicago-Naperville, IL-IN-WI 2008 ozone area				
Illinois	373.43	294.93	293.35	80.08
Indiana	93.45	79.98	76.80	16.65
Wisconsin	4.66	3.13	2.99	1.67
Total	471.54	378.04	373.14	98.40

Table 5. Projected Emissions of VOC emissions for the Illinois, Indiana, and Wisconsin portions of the Chicago nonattainment area 2030 and 2035 (tons/day)

Sector	2019 attainment year	2030 interim year	2035 maintenance year	Emissions Reduction 2019-2035
Illinois				
Point	46.32	44.61	46.56	-0.24
Area	232.00	225.11	221.67	10.33
On-Road	66.45	37.43	34.26	32.19

Non-road	67.67	66.39	67.35	0.32
Total	412.44	373.54	369.84	42.60
Indiana				
Point	11.30	11.40	11.57	-0.27
Area	17.00	17.58	17.85	-0.85
On-road	6.80	3.77	2.93	3.87
Non-road	5.53	4.80	4.35	1.18
Total	40.63	37.55	36.70	3.93
Wisconsin				
Point	0.19	0.26	0.26	-0.07
Area	3.58	3.49	3.56	0.02
On-Road	0.89	0.54	0.47	0.42
Non-road	0.70	0.63	0.62	0.08
EGU Emission credit		0.37	0.37	0.37
Total	5.36	4.92	4.91	0.45
Chicago-Naperville, IL-IN-WI 2008 ozone area				
Illinois	412.44	373.54	369.84	42.60
Indiana	40.63	37.55	36.70	3.93
Wisconsin	5.36	4.92	4.91	0.45
Total	458.43	416.01	411.45	46.98

In summary, Illinois' maintenance demonstration for the Chicago area shows maintenance of the 2008 ozone NAAQS by providing emissions information to support the demonstration that future emissions of NO_x and VOC will remain at or below 2019 emission levels when considering both future source growth and implementation of future controls. The NO_x and VOC emissions in the Illinois portion of the Chicago area are projected to decrease by 80.08 tons/day and 42.60 tons/day, respectively, between 2019 and 2035. NO_x and VOC emissions in the entire Chicago area are projected to decrease by 98.40 tons/day and 46.98 tons/day respectively between 2019 and 2035.

3. Continued air quality monitoring.

Illinois has committed to continue monitoring ozone levels according to an EPA approved monitoring plan, as required to ensure maintenance of the ozone NAAQS. Should changes in the

location of an ozone monitor become necessary, Illinois has committed to work with EPA to ensure the adequacy of the monitoring network. Illinois remains obligated to meet monitoring requirements and continue to quality assure monitoring data in accordance with 40 CFR part 58, and to enter all data into EPA's Air Quality System (AQS) in accordance with Federal guidelines.

4. Verification of continued attainment.

The State of Illinois has confirmed that it has the legal authority to implement and enforce the measures relied upon to attain and maintain the NAAQS pursuant to the Illinois Environmental Protection Act. This includes the authority to adopt, implement, and enforce any subsequent emission control measures determined to be necessary to correct future ozone attainment problems in the Illinois portion of the Chicago area.

Verification of continued attainment is accomplished through operation of the ambient ozone monitoring network and the periodic update of the area's emissions inventory. Illinois will continue to operate an EPA approved ozone monitoring network. In addition, to track future levels of emissions, Illinois will continue to develop and submit to EPA updated emission inventories for all source categories at least once every 3 years, consistent with the requirements of 40 CFR part 51, subpart A, and in 40 CFR 51.122. The Consolidated Emissions Reporting Rule (CERR) was promulgated by EPA on June 10, 2002 (67 FR 39602). The CERR was replaced by the Annual Emissions

Reporting Requirements (AERR) on December 17, 2008 (73 FR 76539). The most recent triennial inventory for Illinois was compiled for 2014.

5. What is the contingency plan for the Illinois portion of the Chicago area?

Section 175A of the CAA requires that the state must adopt a maintenance plan, as a SIP revision, that includes such contingency measures as EPA deems necessary to ensure that the state will promptly correct a violation of the NAAQS that occurs after redesignation of the area to attainment of the NAAQS. The maintenance plan must identify: the contingency measures to be considered and, if needed for maintenance, adopted and implemented; a schedule and procedure for adoption and implementation; and a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be considered, adopted, and implemented. The maintenance plan must include a commitment that the state will implement all measures with respect to the control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d) of the CAA.

As required by section 175A of the CAA, Illinois has adopted a contingency plan for the Illinois portion to address possible future ozone air quality problems. The contingency plan adopted by Illinois has two levels of response, a Level I response and a Level II response.

In Illinois' plan, a Level I response will be triggered in the event that: 1) the fourth highest ozone concentration at any monitoring site in the Chicago area exceeds 0.075 ppm in any year or 2) the maintenance area's NO_x or VOC emissions inventories increase more than 5 percent above the levels included in the 2019 attainment year inventories. Illinois committed to compiling VOC and NO_x emissions inventories every three years for the duration of the Maintenance Plan to facilitate the emissions trends analysis. If a Level I response is triggered, Illinois will coordinate with LADCO and other Lake Michigan states to evaluate the causes of high ozone levels or the emissions trends and to determine if control measures are needed to ensure continued attainment of ozone NAAQS. Under Level I, measures that could be implemented in a short time would be selected, if any are deemed necessary, to be in place quickly after the Illinois EPA becomes aware that corrective measures have been triggered. Control measures selected under Level I will be adopted in most cases within 18 months after a determination is made, and implemented, generally, within 24 months of adoption.

A Level II response would be triggered if a violation of the ozone NAAQS occurs at a monitoring site within the Chicago maintenance area. In order to select appropriate corrective measures, Illinois will work with LADCO and other Lake Michigan states to conduct a comprehensive study to determine the causes of the violation and the control measures necessary to mitigate

the problem. The analysis will examine the following factors: the number, location, and severity of the ambient ozone concentrations; the weather patterns contributing to ozone levels; potential contributing emissions sources; the geographic applicability of possible contingency measures; emissions trends, including timeliness of implementation of scheduled control measures; current and recently identified control technologies; and air quality contributions from outside the maintenance area. Implementation of necessary controls in response to a Level II trigger will take place as expeditiously as possible, but no later than 18 months after Illinois determines, based on quality-assured ambient data, that a violation of the NAAQS has occurred. Illinois will select contingency measures from the following list, or Illinois will implement other measures deemed appropriate and effective at the time the selection is made. However, Illinois is not limited to the measures on this list:

Point Source Measures - Broader geographic applicability of existing measures, if determined to be an issue;

- Oil and Gas Sector Emission Guidelines, once finalized by EPA;
- Revisions to Illinois NO_x state rules for boilers and engines.
- Implementation of OTC model rules for above ground storage tanks;

Mobile Source Measures

- Regulations on the Sale of Aftermarket Catalytic Converters

Area Source Measures

- Current California Commercial and Consumer Products - Aerosol Adhesive Coatings, Dual Purpose Air Freshener/Disinfectant, etc.
- Regulations on Small Off-Road Engines ("SORE").

To qualify as a contingency measure, emissions reductions from that measure must not be factored into the emissions projections used in the maintenance plan.

EPA has concluded that Illinois' maintenance plan adequately addresses the five basic components of a maintenance plan: attainment inventory, maintenance demonstration, monitoring network, verification of continued attainment, and a contingency plan. In addition, as required by section 175A(b) of the CAA, Illinois has committed to submit to EPA an updated ozone maintenance plan eight years after redesignation of the Illinois portion of the Chicago area to cover an additional ten years beyond the initial 10-year maintenance period. Thus, EPA finds that the maintenance plan SIP revision submitted by Illinois for the Chicago area meets the requirements of section 175A of the CAA and EPA proposes to approve it as a revision to the Illinois SIP.

V. Has the state adopted approvable motor vehicle emission budgets?

A. Motor Vehicle Emission Budgets

Under section 176(c) of the CAA, new transportation plans,

programs, or projects that receive Federal funding or support, such as the construction of new highways, must "conform" to (i.e., be consistent with) the SIP. Conformity to the SIP means that transportation activities will not cause or contribute to any new air quality violations, increase the frequency or severity of any existing air quality problems, or delay timely attainment or any required interim emissions reductions or any other milestones. Regulations at 40 CFR part 93 set forth EPA policy, criteria, and procedures for demonstrating and assuring conformity of transportation activities to a SIP.

Transportation conformity is a requirement for nonattainment and maintenance areas. Maintenance areas are areas that were previously nonattainment for a particular NAAQS, but that have been redesignated to attainment with an approved CAA section 175A maintenance plan for the NAAQS.

Under the CAA, states are required to submit, at various times, control strategy SIPs for nonattainment areas and maintenance plans for areas seeking redesignations to attainment of the ozone standard and maintenance areas. See the SIP requirements for the 2008 ozone NAAQS in EPA's December 6, 2018 implementation rule (83 FR 62998). These control strategy SIPs (including reasonable further progress plans and attainment plans) and maintenance plans must include the Budgets for criteria pollutants, including ozone, and their precursor pollutants (VOC and NO_x for ozone) to address pollution from on-road transportation sources. The Budgets are the portion of the

total allowable emissions that are allocated to highway and transit vehicle use that, together with emissions from other sources in the area, will provide for attainment or maintenance. See 40 CFR 93.101.

Under 40 CFR part 93, a Budget for an area seeking a redesignation to attainment must be established, at minimum, for the last year of the maintenance plan. A state may adopt Budgets for other years as well. The Budgets serve as a ceiling on emissions from an area's planned transportation system. The Budget concept is further explained in the preamble to the November 24, 1993, Transportation Conformity Rule (58 FR 62188). The preamble also describes how to establish the Budget(s) in the SIP and how to revise the Budget, if needed, after initially establishing a Budget in the SIP.

As discussed earlier, Illinois' maintenance plan includes NO_x and VOC Budgets for the Illinois portion for 2035, the last year of the maintenance period. The Budgets were developed as part of an interagency consultation process which includes Federal, state, and local agencies. The Budgets were clearly identified and precisely quantified. These Budgets, when considered together with all other emissions sources, are consistent with maintenance of the 2008 ozone NAAQS. These Budgets represent the projected 2035 on-road emissions plus a safety margin, which is described below.

Table 6. 2035 Budgets for the Illinois portion for the 2008 Ozone NAAQS Maintenance Plan (tons/day)

Pollutant	2035 Budget
NO _x	110.00

VOC	65.00
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EPA is proposing to approve the Budgets for use to determine transportation conformity in the Illinois portion of the Chicago-Naperville, IL-IN-WI area, because EPA has determined that the area can maintain attainment of the 2008 ozone NAAQS for the relevant maintenance period with mobile source emissions at the levels of the budgets. Also, EPA is reviewing the budgets to determine if the submitted budgets meet the adequacy criteria in the transportation conformity regulations (40 CFR 93.118(e)(4)). Additionally, as required by the transportation conformity rule (40 CFR 93.118(f)(2)), EPA is using this proposal to notify the public that EPA is beginning a 30-day comment period on the adequacy of the submitted motor vehicle emissions budgets. Comments on the adequacy of the budgets should be submitted to the docket for this proposal. EPA will make a final determination on the adequacy of the submitted budgets either in a final action on this proposal or notifying the State in writing, notifying the public by publishing a *Federal Register* notice and announcing the determination on EPA's adequacy web page.⁶

B. What is a safety margin?

A "safety margin" is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. As noted

⁶ See www.epa.gov/state-and-local-transportation/adequacy-review-state-implementation-plan-sip-submissions-conformity.

in Tables 4 and 5, the emissions in the Illinois portion of the Chicago area are projected to have safety margins of 80.08 tons/day for NO_x and 42.60 tons/day for VOC in 2035 (the difference between the attainment year, 2019, emissions and the projected 2035 emissions for all sources in the Illinois portion). Even if emissions exceeded projected levels by the full amount of the safety margin, the counties would still demonstrate maintenance since emission levels would equal those in the attainment year.

The transportation conformity regulations allow states to allocate all or a portion of a documented safety margin to the motor vehicle emissions budgets for an area (40 CFR 93.124(a)). Illinois is allocating a portion of the safety margin, 61.20 tons/day of NO_x and 30.74 tons/day of VOC, to the mobile sector for the 2035 Budgets. Since only a part of the safety margin is being used, maintenance requirements are still easily met. Illinois can request an allocation to the Budgets of the available safety margins reflected in the demonstration of maintenance in a future SIP revision.

VI. VOC RACT.

Sections 172(c)(1) and 182(b)(2) of the CAA require states to implement RACT in ozone nonattainment areas classified as moderate (and higher). Specifically, these areas are required to implement RACT for all major VOC and NO_x emissions sources and for all sources covered by a CTG. A CTG is a document issued by EPA which establishes a "presumptive norm" for RACT for a

specific VOC source category. States must submit rules, or negative declarations when no such sources exist for CTG source categories.

EPA's SIP Requirements Rule for the 2008 ozone NAAQS indicates that states may meet RACT through the establishment of new or more stringent requirements that meet RACT control levels, through a certification that previously adopted RACT controls in their SIPs approved by EPA for a prior ozone NAAQS also represent adequate RACT control levels for attainment of the 2008 ozone NAAQS, or with a combination of these two approaches. In addition, a state may submit a negative declaration in instances where there are no CTG sources.

Illinois' VOC RACT demonstration under the 2008 moderate classification was fully approved into the SIP by EPA on August 13, 2021 (86 FR 44616). Illinois certifies that the Illinois portion of the Chicago area's moderate area VOC RACT program also satisfies serious area VOC RACT requirements.

Illinois has previously adopted RACT rules for VOC emission sources in the Chicago area under 35 Ill. Adm. Code Part 218. Illinois certifies that these regulations still satisfy the serious area VOC RACT requirements for the Illinois portion of the Chicago area under the 2008 8-hour ozone NAAQS. Major non-CTG VOC sources, which are subject to RACT, are major VOC sources which are not subject to the applicability criteria in a CTG. Many major sources of ozone precursors located in the ozone nonattainment area that are not subject to specific RACT

rules are subject to generic RACT rules. The serious major source threshold of 50 tons per year is addressed for non-CTG VOC major sources under 35 Ill. Adm. Code Part 218 Subparts PP, QQ, RR, and TT.

Illinois has previously submitted several Negative Declarations for CTG categories for which there were no applicable sources found in Illinois that meet the applicability criteria for those CTGs and which did not have appropriate controls due to other state requirements. In those cases, it was unnecessary to adopt new state rules and submit SIP revisions to address those CTG categories. Illinois certifies that the negative declarations for the CTGs for the Ship Building and Ship Repair Industry, Natural Gas/Gasoline Processing Plants, Aerospace Manufacturing and Rework Facilities, High-Density Polyethylene, Polypropylene Manufacturing, Vegetable Oil Processing, and Oil and Natural Gas Industry, approved by EPA on August 13, 2021, are still valid (86 FR 44616).

Illinois evaluated whether its VOC sources under the Industrial Wastewater category meet the serious level RACT requirements through RACT equivalence or RACT applicability of potential VOC emissions being below the 50 tons/year major source threshold. Illinois' analysis of its industrial wastewater VOC sources is detailed below.

Industrial Wastewater

EPA issued a draft CTG for the industrial wastewater

category in September 1992. However, because this CTG was never finalized, industrial wastewater sources are considered to be non-CTG sources. Industrial wastewater is a category that is not covered by the Illinois non-CTG RACT rule.

On December 23, 1999, Illinois submitted to EPA a Negative Declaration Letter for the Chicago area covering the Industrial Wastewater sources. At that time, Illinois determined that all sources in the Chicago area to which the draft CTG would be applicable were covered by other regulations that were as stringent or more stringent than the draft CTG. Those sources were two refineries and one chemical plant that were subject to Federal regulations covering waste operations that were equally or more stringent than the CTG.

Illinois reviewed its most recent inventory to determine if any sources fall under the industrial wastewater category, including organic chemicals, plastics, and synthetic fibers; pharmaceuticals; pesticides manufacturing; petroleum refining; pulp, paper, and paperboard mills; and hazardous waste treatment, storage, and disposal facilities. Illinois found 54 sources that required further review. Illinois examined each unit at these sources and the operating permits of those sources to determine whether any source was a significant source of wastewater or if the draft CTG was potentially applicable to a source or unit. Of those 54 sources, it was determined that the draft CTG would be applicable to only six sources. It was found that all subject sources were covered under the NESHAP at 40 CFR

63 subpart G, the NESHAP at 40 CFR 63 subpart FFFF, or by 35 Ill. Adm. Code Section 218 Subpart C.

Illinois requested additional information for twelve industrial wastewater sources that were identified as potentially being subject to non-CTG RACT based on historical emissions. On January 25, 2022, Illinois submitted supplementary information demonstrating that these twelve sources were below the 50 tons/year non-CTG major source threshold for serious areas or demonstrated RACT equivalence. The twelve sources that Illinois evaluated include the following refineries and chemical plants: Ester Solutions, Hexion Inc., INEOS Styrolution America LLC, INEOS Joliet, Polynt Composites USA, AKZO Nobel, AbbVie, LyondellBasell, Exxon Mobil Oil Corp., Citgo Petroleum, Koppers Inc., and Stepan Co.

Ester in Cook County, Hexion in Bedford Park, INEOS Styrolution America LLC in Channahon, and Polynt in Carpentersville were not subject to RACT because their potential to emit (PTE) VOC from wastewater was less than 50 tons/year. Ester has a permitted VOC level of 7.71 tons/year. Hexion has a permitted VOC level of 10.82 tons/year. INEOS Joliet has a permitted VOC level of 9.27 tons/year. The reported VOC emissions from wastewater at INEOS Styrolution is less than 1 ton/year and the VOC PTE from wastewater is well below 50 tons/year. Wastewater is not a significant source of VOC emissions at Polynt as there is no mention of wastewater or wastewater treatment in Polynt's operating permit.

Although Akzo in Morris had a VOC PTE of over 50 tons/year, it was subject to various control measures. Akzo sent its VOC emissions to an afterburner to achieve at least 85 percent control. After considering these controls, the total VOC PTE from wastewater at Akzo was determined to be less than 1 ton/year.

AbbVie in North Chicago demonstrated RACT equivalence. Most of its wastewater was taken off site for treatment. The remaining VOC containing wastewater streams were well controlled at the on-site wastewater treatment plant. The requirements to conduct pretreatment were federally enforceable through its Discharge Control Document, which was issued by the publicly owned treatment works and Illinois. The estimates that AbbVie gave for controlled and uncontrolled emissions resulted in about 98 percent control of VOC from their wastewater operations. Illinois concluded that AbbVie was well controlled and that this level of control represented RACT.

LyondellBasell is subject to the Miscellaneous Organic Chemical Manufacturing NESHAP and Benzene Waste Operations (BWON) NESHAP (40 CFR part 61, subpart FF). After considering these applicable NESHAPs, EPA calculated the total VOC PTE to be 20.38 tons/year, which was below the 50 tons/year non-CTG threshold.

Both Exxon Mobil Oil Corporation's Joliet Refinery and Citgo Petroleum's Lemont Refinery demonstrated that they had achieved RACT equivalence for their VOC wastewater emissions.

Both refineries are subject to the requirements of 40 CFR part 63, subpart CC "National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries" (MACT CC) and 40 CFR part 61, subpart FF "National Emission Standard for Benzene Waste Operations" (BWON). Under these programs, Exxon Mobil has a control efficiency of 98 percent for wastewater VOC emissions and Citgo has a control efficiency of 99.4 percent for wastewater VOC emissions. The control efficiencies are calculated using the pre-control and post-control VOC emissions from the wastewater at each refinery. Exxon Mobil's pre-control VOC emissions are calculated site-wide for all streams at point of generation and includes maintenance and spills. Exxon Mobil's post-control VOC emissions are also calculated site-wide and accounts for the uncontrolled wastewater streams, effluent from the waste treatment unit, and the uncontrolled maintenance and spills. Citgo's pre-control VOC emissions are calculated site-wide for all streams at point of generation and includes maintenance and spills in the wastewater system. Citgo's post-control VOC emissions are also calculated site-wide and accounts for the uncontrolled VOC emissions from the wastewater system.

Koppers submitted its supporting data for VOC emissions from the wastewater system at the plant. Environmental Resources Management, Inc. performed the modeling of the wastewater treatment plant using a Toxchem model to predict the annual potential VOC emissions. The total VOC PTE at Koppers was 2.25 tons/year, which was far below the 50 tons/year non-CTG

threshold.

Illinois issued a construction permit for Stepan Co. (I.D. No.: 197800AAE, issued June 8, 2021) that limits the throughput from upstream processes into the wastewater stream. This results in a potential to emit of 17.70 tons/year, which is below the 50 tons/year non-CTG threshold. This limit is due to new controls, which include an additional air stripper system for the wastewater treatment plant, that were installed in 2020. Illinois has submitted this construction permit as a revision to the Illinois SIP. EPA is proposing to approve this construction permit as a revision to the Illinois SIP, making the throughput limits federally enforceable.

Based on the information that Illinois provided, we agree that that these sources are below 50 tons/year non-CTG threshold for moderate areas or have demonstrated RACT equivalence. Therefore, EPA is proposing to find that these VOC RACT submittals for the Illinois portion of the Chicago area meet the serious VOC RACT requirements for the 2008 ozone NAAQS under the CAA.

VII. Enhanced I/M Program.

CAA section 182(c)(3) requires states with ozone nonattainment areas classified as serious or higher to implement an enhanced vehicle I/M program. The general purpose of motor vehicle I/M programs is to reduce emissions from in-use motor vehicles in need of repairs and thereby contribute to state and local efforts to improve air quality and to attain the NAAQS.

The Illinois I/M program has been in operation since 1984. It was originally implemented in accordance with the 1977 CAA Amendments and operated in the eight counties of Cook, Lake, DuPage, McHenry, Kane, Will, Grundy (2 townships), and Kendall (1 township). Vehicles were originally tested by measuring tailpipe emissions using a steady-state idle test. Tampering inspections were added in 1989.

The 1990 CAA Amendments set additional requirements for I/M programs. For moderate areas, a "basic" program was required under section 182(b)(4). For serious or worse areas, an "enhanced" program was required under section 182(c)(3). EPA's requirements for basic and enhanced I/M programs are found in 40 CFR part 51, subpart S.

Illinois' I/M program transitioned to an enhanced program in December 1995. The major enhancement involved adding new test procedures to more effectively identify high-emitting vehicles. These new test procedures included a transient emissions test in which tailpipe emissions were measured while the vehicle was driven on a dynamometer (a treadmill-type device). Improving repairs and public convenience were also major focuses of the enhancement effort.

Since July of 2001, all model year (MY) 1996 and later cars and light trucks have been inspected by scanning the vehicle's computerized second-generation on-board diagnostic (OBD) system instead of measuring tailpipe emissions. As of July 2008, the program dropped tailpipe testing entirely and has inspected all

vehicles by scanning the OBD system. This change was the result of statutory changes in the State's 2007-2009 biennial budget which exempted model years of vehicles not federally required to be equipped with this OBD technology (MY 1995 and earlier cars and light trucks and MY 2006 and earlier heavy trucks).

EPA fully approved the Illinois enhanced I/M program on February 22, 1999 (64 FR 8517) and on August 13, 2014 (79 FR 47377). Illinois' I/M program was revised and approved on August 13, 2014 (79 FR 47377). The revisions to Illinois' I/M program included a demonstration under section 110(l) of the CAA addressing lost emission reductions associated with the program changes.

The legal authority and administrative requirements for the Illinois I/M program are found in 625 ILCS 5/13C (Illinois Vehicle Emission Inspection Law of 2005); 35 Ill. Adm. Code 240 (Emissions Standard and Limitations for Mobile Source); and 35 Ill. Adm. Code 276 (Procedures to be followed in the performance of inspections of Motor Vehicle Emissions).

To support their certification of the enhanced I/M program, Illinois submitted a modeling demonstration with EPA's enhanced performance standard for areas designated and classified under the 8-hour ozone standard, as specified in 40 CFR 51.351(i). Illinois used the most recent version of EPA's mobile source emissions model, MOVES3.0.2 (released in September 2021), for the analysis. This modeling was conducted in accordance with EPA's technical guidance: Performance Standard Modeling for New

and Existing Vehicle Inspection and Maintenance (I/M) Programs Using the MOVES Mobile Source Emissions Model, EPA-420-B-14-006, January 2014, and MOVES3 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity, EPA-420-B-20-052, November 2020.

The performance standard modeling analysis involves a comparison of emission reductions from EPA's model program specified in 40 CFR 51.351(i) and Illinois' actual program in the eight counties of Cook, Lake, DuPage, McHenry, Kane, Will, Grundy (2 townships), and Kendall (1 township).

To demonstrate that an enhanced I/M program meets the performance standard, the actual I/M program must obtain the same or lower emissions levels as the EPA model program within ± 0.02 gram per mile. Illinois' I/M performance analysis shows that Illinois' I/M program achieves emission reductions at least as great as this criterion. Illinois' demonstration supports its certification that the current I/M program meets the applicable enhanced I/M performance standard requirements in 40 CFR Part 51, Subpart S in all areas in which the program is implemented for the 2008 ozone NAAQS.

VIII. Clean Fuels Vehicles Program.

CAA section 182(c)(4) requires states with ozone nonattainment areas classified as serious or higher to submit a SIP revision describing implementation of a CFVP, as described in CAA Title II Part C (40 CFR 88). EPA approved Illinois' CFVP on March 19, 1996 (61 FR 11139). CAA section 182(c)(4) included

numerical standards for the CFVP that were intended to encourage innovation and reduce emissions for fleets of motor vehicles in certain nonattainment areas as compared to conventionally fueled vehicles available at the time. As originally adopted, those Clean Fuel Fleet standards were substantially more stringent than the standards that applied to vehicles and engines generally. Now that EPA has begun implementing Tier 3 emission standards in 40 CFR part 86, subpart S, the Clean Fuel Fleet standards are either less stringent than or equivalent to the standards that apply to vehicles and engines generally. On July 29, 2021 (86 FR 34308), EPA published a final rule in which EPA determined that vehicles and engines certified to current emission standards under 40 CFR part 86 or 1036 are deemed to also meet the Clean Fuel Fleet standards as Ultra Low-Emission Vehicles. Since vehicle emission standards have only become more stringent since Illinois' program was approved, the CAA section 182(c)(4) CFVP requirement remains satisfied without the need for further action by the state.

IX. Enhanced Monitoring Plan.

Section 182(c)(1) of the CAA requires States with nonattainment areas classified serious or higher adopt and implement a program to improve air monitoring for ambient concentrations of ozone, NO_x, and VOC. EPA initiated the PAMS program in February 1993. The PAMS program required the establishment of an enhanced monitoring network in all ozone nonattainment areas classified as serious, severe, or extreme.

On February 25, 1995 (59 FR 9091), EPA approved Illinois' SIP revision establishing an enhanced monitoring program.

Since that time, EPA concluded that requiring enhanced monitoring for ozone nonattainment areas classified as moderate or above is appropriate for the purposes of monitoring ambient air quality and better understanding ozone pollution. In EPA's revision to the ozone standard on October 1, 2015, EPA relied on the authority provided in sections 103(c), 110(a)(2)(B), 114(a) and 301(a)(1) of the CAA to expand the PAMS applicability to areas other than those that are serious or above ozone nonattainment and substantially revise the PAMS requirements in 40 CFR part 58 appendix D (80 FR 65292). Specifically, this rule required states with moderate and above ozone nonattainment areas to develop and implement an EMP. These plans should detail enhanced ozone and ozone precursor monitoring activities to be performed to better understand area-specific ozone issues.

To meet this requirement, Illinois submitted its updated EMP as part of the Illinois Ambient Air Monitoring 2019 Network Plan, which has been approved by EPA. Illinois will continue to meet its CAA section 182(c)(1) EMP requirements by maintaining an air monitoring network in the Illinois portion of the Chicago area. Illinois will work with EPA through the air monitoring network review process, as required by 40 CFR part 58, to determine the adequacy of the ozone monitoring network, additional monitoring needs, and recommended monitor decommissions. Air monitoring data from these monitors will

continue to be quality assured, reported, and certified according to 40 CFR part 58.

Illinois will continue to meet its CAA section 182(c)(1) EMP requirements by including its EMP in Illinois' Air Monitoring Network Plan, which is subject to EPA review and approval on an annual basis. Therefore, EPA is proposing to find that Illinois has met the EMP requirements for its portion of the Chicago area for the 2008 ozone NAAQS.

X. NO_x RACT waiver.

In some cases, an ozone nonattainment area might attain the ozone standard, as demonstrated by three consecutive years of adequate monitoring data, without having implemented the section 182(f) NO_x provisions over that 3-year period. Where the NO_x requirements were not implemented over that 3-year period, the section 182(f) language is met since "additional" reductions of NO_x would not contribute to attainment. That is, since attainment has already occurred, additional NO_x reductions could not improve the area's attainment status and, therefore, the NO_x exemption request could be approved.

EPA's approval of the exemption, if warranted, would be granted on a contingent basis (i.e., the exemption would last for only if the area's monitoring data continue to demonstrate attainment). The State must continue to operate an appropriate air quality monitoring network, in accordance with 40 CFR part 58, to verify the attainment status of the area. The air quality data relied on for the above determinations must be

consistent with 40 CFR part 58 requirements and other relevant EPA guidance. If it is subsequently determined by EPA that the area has violated the standard, EPA would conduct notice and comment rulemaking to remove the NO_x exemption.

Specifically, Illinois requested to exempt major stationary sources of NO_x (as defined in section 302 and subsections 182(c) and (d) of the CAA from the RACT requirements of section 182(b)(2)), based on the fact that the entire nonattainment area, as the result of permanent and enforceable emission control measures, has recorded three years of complete, quality assured ambient air quality monitoring data for the years 2019-2021 demonstrating attainment of the 2008 ozone standard, as shown in Table 1. As such, the area is eligible for a waiver of NO_x RACT requirements, as specified in section 182(f)(1)(A) of the CAA. Upon final approval of the NO_x waiver, Illinois will not be required to adopt and implement NO_x emission control regulations pursuant section 182(f) for the Illinois portion of the Chicago area to qualify for redesignation. If the Chicago area violates before redesignation, then EPA would not be able to finalize approval of a NO_x waiver.

XI. Proposed actions.

EPA is proposing to determine that the Illinois portion of the Chicago area is attaining the 2008 ozone NAAQS, based on quality-assured and certified monitoring data for the 2019-2021 period. EPA is proposing to approve the VOC RACT, enhanced I/M, CFVP, and EMP SIP revisions included in Illinois' January 25,

2022 submittal because they satisfy the serious requirements of the CAA for the Illinois portion of the Chicago area. EPA is proposing to approve a CAA section 182(f) waiver from NO_x RACT requirements for the Illinois portion of the Chicago area under the 2008 ozone NAAQS because it satisfies the requirements of the CAA. EPA is proposing to determine that, if and when EPA approves Illinois' VOC RACT, enhanced I/M, CFVP, EMP, and NO_x RACT Exemption SIP submittals, the Illinois portion of the Chicago area will have met the requirements for redesignation under section 107(d)(3)(E) of the CAA. EPA is thus proposing to change the legal designation for the Illinois portion of the Chicago-Naperville, IL-IN-WI area from nonattainment to attainment for the 2008 ozone NAAQS. EPA is also proposing to approve, as a revision to the Illinois SIP, the state's maintenance plan for the area. The maintenance plan is designed to keep the Illinois portion of the Chicago area in attainment of the 2008 ozone NAAQS through 2035. Finally, EPA is proposing to find adequate and approve the newly-established 2035 Budgets for the Illinois portion of the Chicago area.

XII. Statutory and executive order reviews.

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any

new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because redesignation is an action that affects the status of a geographical area and does not impose any new regulatory requirements on tribes, impact any existing sources of air pollution on tribal lands, nor impair the maintenance of ozone national ambient air quality standards in tribal lands.

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Oxides of nitrogen, Ozone, Volatile organic compounds.

40 CFR Part 81

Environmental protection, Air pollution control, Administrative practice and procedure, Designations and classifications, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: March 3, 2022.

Debra Shore,
Regional Administrator, Region 5.

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